

Midwest Conference Abstracts

Paper Presentation Abstracts:

Excavating Archaeological Data: Reconstructing Chimú Settlement Patterns in the Lower Moche Valley

Robyn E. Cutright and Sandra Jablonski, Centre College

Between 1969 and 1975 the Chan Chan-Moche Valley Project surveyed the lower Moche Valley and conducted excavations at Chan Chan under the direction of Michael Moseley and Carol Mackey. While some data from the survey have been incorporated into multiple dissertations and articles, a comprehensive analysis of post-Moche settlement patterns was never published. Given site destruction in the face of increasing urbanization around Trujillo and large-scale irrigation projects in the region, data from the 1970s may represent our best bet at reconstructing Chimú occupation of the lower valley outside Chan Chan. In this paper, we discuss the ongoing process of digitizing and interpreting this survey data to address two key issues: the emergence of the Chimú state at the end of the Middle Horizon, and the political and economic organization of the Chimú heartland in light of several decades of research in the empire's northern and southern provinces.

Mapping the City: Constructing the Colonial Image of Cusco, Peru

Raymond (Sandy) Hunter, University of Chicago

Maps, regardless of accuracy and projection, are not objective representations of reality but rather illustrate a particular vision of a bounded space. These ideological representations reify spatial conceptions, and thus historical maps provide a lens through which dominant understandings of past space can be accessed in the present. Early European maps of the New World centre of Cusco display 'the city' as regimented, 'civilized' space within a European understanding of these terms. Through a comparison of such maps with available archaeological data conclusions can be drawn on two fronts: 1) what comprised a late 16th century European ideal of the city as space of the urban and civilized, and 2) the ways in which such visual representations contributed to a colonizing discourse that annexed indigenous spaces, transforming them visually into familiar European models of urbanity.

Camelids, Consumption, and Ceremony: Preliminary analyses of a terminal Middle Horizon faunal assemblage at Tumilaca la Chimba, Moquegua, Peru

Caleb Kestle, University of Illinois at Chicago, and Nicola Sharratt, Georgia State University

"He who is cruel to *animals* becomes hard also in his dealings with men. *We* can judge the heart of a man by his *treatment of animals*" -Immanuel Kant. Though this quote is often

misappropriated by organizations such as PETA, there remains a kernel of truth in it; animals are part of our social world, and their placement within it reflects our own ideas about class, status, and arguably personhood. Given the role of animals in the creation of social distinctions, we explore the preliminary results of faunal analysis from the terminal Middle Horizon (AD 950-1150) site of Tumilaca la Chimba. Our results suggest that while animal use there was broadly similar to neighboring Middle Horizon sites, and although domestic contexts are generally characterized by low faunal diversity, with camelids dominating assemblages, differences across the site suggest internal social distinctions in the Tumilaca community. Analyses reveal variations in diversity and taphonomic treatment of animal remains between households. We also discuss faunal assemblage from a non-domestic unit. Situating these data in the context of other excavation and material evidence, we suggest that the structure may represent collective ceremonial space, or some other community focused activity area.

Legacies of war: the transformation of hilltop fortifications during the Late Horizon, Colca Valley, Peru

Lauren Kohut, Vanderbilt University

In contrast to many other highland regions, the arrival of the Inka to the Colca Valley did not signal a significant shift in overall settlement patterns. Nearly all settlements, including fortified ones, continued to be occupied in the Late Horizon; a pattern which has suggested that incorporation into the Inka state was locally-mediated. Results from two seasons of survey and excavation of hilltop fortifications (pukaras) in the valley suggest a more complicated mix of continuity and transformation. This paper examines how the use and significance of fortified settlements changed as the region became integrated into the Inka state. While a majority of fortified settlements continued to be occupied and even grew throughout the Late Horizon, there is evidence of significant rebuilding episode which transformed domestic settlement in at least one of the sites. Curiously, the defensive walls from the LIP were maintained, rather than dismantled, at these sites. I suggest that the significance of these massive constructions changed along with the realities of life at the sites—changing from defensive markers of allies and enemies, into social and political marker reflecting the new political reality.

Tracing the Inka Past: Movement and Memory in Ancient Cusco

Steve Kosiba, University of Alabama

In creating Cusco, the Inkas assembled a sacred landscape of monuments and ritual pathways that embodied their myths and encoded their social principles. But how did Cusco's landscape, which was invested with pre-Inka meanings and memories, *become Inka*? This paper presents recent archaeological survey and excavation data from Cusco to explore the ritual practices and processions through which Cusco's people recognized their past and affirmed their social roles during the height of Inka rule. It examines how the pathways and places of Cusco—the processions of the *Qhapaq Raymi* ceremony, the mythical environs of Inka *wak'as* such as

Wanakauri, and the architecture of Inka centers such as Ollantaytambo—engendered multiple and often contradictory perspectives of Cusco’s past. My principal argument is that the inhabitants of ancient Cusco staked different claims to the past by walking particular routes and engaging in theatrical rites that invoked indigenous or Inka social memories. In tracing these routes, the paper takes an experiential approach and moves beyond top-down Inka myths of divine origins to explore what I term “cultures of articulation”—the complicated ways that indigenous landscapes and memories may obstruct or become entangled with a state’s pretensions.

What Kind of Text is Guaman Poma's *Warikza arawi*?

Bruce Mannheim, University of Michigan

It is commonplace to treat the sixteenth- and seventeenth-century South American sources as primarily referential, to mine them for specific information that they bring to bear on their subjects—be they colonial or pre-conquest. Within this vision, a historiography of these sources is primarily external—to understand the relationships they have with other texts from the same period, to identify the social and political position of the author within the colonial world; and to trace the lines of influence from one writer to another. In this paper I take on a different angle of colonial historiography, by focusing on three internal, linguistic aspects of the *Nueva corónica*: *specificity*; *production format*; and *genre*. I do so by exploring the textuality of a single page of the *Nueva corónica* — Guaman Poma’s description of a ritual that took place each autumn in Inka Cuzco, which—I hope to show—is not a description at all, but a template for the ritual. In the process, I discuss a new tool that can be used in the historiography of the colonial Andes.

Compositional analysis of food vessels from the Middle Sicán Great Plaza

Go Matsumoto, Southern Illinois University

This presentation discusses the results of a recent compositional analysis by INAA of ceramic sherds excavated near Huaca Loro elite cemetery within the Great Plaza at the Middle Sicán state capital in the Lower La Leche Valley. The sherds are thought to have been a part of serving vessels (bowls, dishes, and plates) used during feasts at the plaza. It was hypothesized that the feasts were sponsored by elites for the commemoration of their ancestors. The vessels were expected to have been regionally produced at a limited number of ceramic workshops affiliated with the associated elite lineage. It follows that the production of food vessels on the part of elite sponsors should have reduced compositional variability of the vessels, which represent the differences in paste recipe and thus may suggest those of raw materials and technological choice in the place of production. Statistical analyses of raw data revealed three compositional groups: Sicán BDP Groups 1, 2, and 3). The first two groups were rich in Ca and U/As respectively. I will discuss the implications of these results.

Identifying Persistent Place in the Nepeña Valley, Peru: Insights from the 2014 Excavations of the Cosma Archaeological Complex

Kimberly Munro, Louisiana State University

Located in the Cordillera Negra (at 2600 M.A.S.L) mountains at the headwaters of the Nepeña River, the Cosma Archaeological Complex was first reported by a team of LSU archaeologists in 2013. The prehistoric remains at Cosma include three platform temple mounds, a domestic area, agricultural terraces, and an Early Horizon hilltop fortress. The small basin, which contains most of the site components, has witnessed repeated episodes of occupations spanning the Initial Period through the Spanish conquest. In this paper I present results of our mapping efforts as well as initial excavation data to evaluate the presence of the Cosma complex as a persistent place in the surrounding region. Overall, results of the 2014 season bring significant insights into the development of a previously unknown locus for ceremonial life and monumental constructions in north-central Peru. This data allows for preliminary considerations of upper valley communities in the development and maintenance of inter-regional spheres of interaction during the Initial Period and Early Horizon.

Multiple Ways to Record Nothing and How the Incas Edited Their Documents: Insights from Matching Khipu

Dennis Ogburn, University of North Carolina at Charlotte

Historical descriptions of the making and use of khipu indicate that khipu makers worked in pairs at every level, keeping duplicate accounts to ensure accuracy. However, the material data we have on the actual making and use of khipu are almost all derived from the study of single examples rather than from pairs that were produced together. Here I discuss insights gained from analysis of four khipu that I have discovered to comprise two remarkable matched pairs, which change our understanding of how khipu functioned. The most notable observations come from a pair of khipu that share a sequence of over 180 pendant cords containing matching values. These reveal that the khipu were not simply fixed records, but were actually edited over time, with pendants either broken off or removed in order to change the data within the record. Also, the analysis indicates that there were two more ways to record the value of zero in addition to using a pendant without knots, and allows us to address the question of standardization in the making and use of khipu.

Militarism and Cultural Development of the Mapuche Culture, South-Central Chile and Western Argentina

Jacob Sauer, Vanderbilt University

The Mapuche of south-central Chile and western Argentina are the only Native American group to successfully militarily engage and defeat both the Inka and Spanish Empires, maintaining their independence for more than 400 continuous years. According to Spanish documents from the 16th and 17th centuries, fortifications played a major role in Mapuche warfare and military success, but very little is known about the nature of Mapuche fortifications. More than their military nature, fortifications reveal information about ethnic, geographic, political, economic, social, and religious orientations as well as the way cultures view and use their surroundings.

Here I present ethnohistoric data on Mapuche fortifications, what is known about their role in Mapuche culture, and the possible connections with northern Andean groups. I then suggest avenues for archaeological research that provide important information on culture contact, community interactions, cultural development, violence, and warfare which can be compared to other indigenous cultures in the Andes and other parts of the world.

Wari Power and Expansion: A View from the South

Maeve Skidmore, Southern Methodist University

Abstract: The idea that the Wari built the first Andean empire has faced increased scrutiny in the past decade, but with little consensus on how to revise models of Wari political organization. This paper considers how changing perspectives on state and imperial power, especially in expansionary contexts, alters how archaeologists view Wari actions undertaken across Peru. It argues that a focus on state control over foreign groups and territories tends to neglect the agency of other groups from within state societies and those at state peripheries. Social and geographic limits to the implementation of Wari power in foreign lands must be accounted for. Critical examination of the Wari archaeological record in the Southern Andes is used to illustrate that while a multi-regional Wari state is still a viable model, much of Wari expansion cannot necessarily be linked to or explained by central state administration.

The Mercury Road: Huancavelica to Potosi

Douglas K. Smit, Brian S. Bauer, and Antonio Coello Rodríguez, University of Illinois at Chicago

The central Andes has the world's largest deposits of silver at Potosi (Bolivia) and one of the world's largest deposits of mercury at Huancavelica (Peru). When mercury and silver-bearing ores are mixed, the mercury amalgamates, or binds, with the silver, drawing out the metal from the surrounding matrix. Together, these two world-famous mineral deposits provided the Spanish crown with vast amounts of wealth for over two hundred years. However, Potosi and Huancavelica are located more than 1250 aerial kilometers from each other. In this paper, we discuss how the Spaniards overcame this great distance and transported thousands of tons of mercury from Huancavelica to Potosi along what we are calling the Mercury Road.

Location, Location, Location: Exploring the Distribution of Trepanations and Cranial Fractures at Kuelap, Chachapoyas, Peru

J.Marla Toyne, University of Central Florida, Orlando

Trepanation (the surgical removal of cranial vault bone) is often seen as a novel find in the archaeological record even when over 900 examples from the Andean region have been examined in recent investigations. Clearly it was a successful practice in some regions, yet its purpose still remains unclear. Commonly assumed to be associated with traumatic injuries to head, this paper explores the relationship between the location of trepanations and both healed (antemortem) and unhealed (perimortem) cranial injuries from a single site. If trepanation were a medical treatment for cranial fractures then there should be a consistent correlation in approximate location. Alternatively, if trepanations were performed for more psychosomatic purposes (such as ritual practices or to treat mental illness), then we may expect a different

distribution. The large cranial collection from Kuelap (n=238) provides an excellent sample to explore the relationship among the distribution of antemortem (n=50) and perimortem (n=98) cranial injuries, and trepanations (healed n=12 and unhealed n=4). Interestingly, trepanations at Kuelap focus in two distinct cranial locations, one of which may support traumatic injuries (left side of the head), the other which suggests intentional purpose (at bregma). Ancient Chachapoya medical practitioners at Kuelap appear to have performed these operations for under different circumstances.

Water Management and Agriculture in Atacama Desert: The Politics of Communities between the Late Intermediate and Inka Periods (A.D. 900 - 1530)

Andrés Troncoso, Universidad de Chile, Frances Hayashida, University of New Mexico, Diego Salazar, César Parcero Oubiña and Pastor Fábrega, Universidad de Chile

The Atacama Desert is one of the driest places on earth. In this challenging environment, past and present inhabitants of the Atacama must establish an adequate and rational management of the resource most basic to life: water. During the Late Intermediate Period (ca. 900 – 1400 AD) complex social systems developed in the area, with aggregated populations that depended on a mixed farming and pastoral economy. They managed water through the construction of complex irrigation systems and terraces and the careful management of soils and crops. Large-scale agriculture in the area served not only as the basis for biological reproduction but for the social and political reproduction of the community as well.

Sometime during the first half of the 15th Century the Inka established its rule over the Atacama based on a territorial strategy, which implied a highly controlled extraction model. The main attraction for the Inka of the Atacama was its mineral wealth, but imperial mining operations had to be provisioned with surplus food produced at agricultural loci.

In this paper we discuss the evidence of pre-Inka and Inka organization of water management and agricultural production in the Loa River Basin, specifically as seen at the sites of Topaín and Panire. We seek to understand and explain the strategies developed by local communities to manage water and agriculture under two distinct sociopolitical contexts, focusing on the social, technological, and political dimensions of production and their changes from a community specialization system to state control of production.

Ethnicity, Ritual, Game Theory: Conflict and Cooperation in the Andes

Howard Tsai, Center for Latin American and Caribbean Studies University of Michigan

Impressive archaeological features in the Andean landscape --extensive canal systems, hilltop forts, imperial installations, and monumental ritual structures -- are in fact fossilized evidence of interactive and strategic decisions made by self-interested actors as individuals or groups. In this paper I discuss the application of game theory to various aspects of Andean prehistory and ethnohistory, covering topics that include the vertical archipelago, Inca imperial strategies, community cooperation, and state collapse. I conclude with the argument that ritual provided a

mechanism for seemingly conflictive actors to extract information and truthfulness from each other, in this case Andean ethnic groups whose interaction conferred the benefits of resource exchange across ecological niches, but at the same time was fraught with the risks of sabotage and betrayal. Game theory provides us with an alternative to the simple dichotomy of conflict versus cooperation; it gives us a tool to model the actors' "playing field" (Pierre Bourdieu) in creating and shaping social structures.

New Perspectives on Ethnic Diversity and Cranial Vault Modification during the Late Intermediate Period in the Colca Valley, Peru

Matthew C. Velasco, Vanderbilt University

Colonial accounts of the inhabitants of the Colca valley describe cranial modification (CVM) practices as emblematic of ethnic identity: the upper-valley Collaguas made their heads long and narrow, while the lower-valley Cabanas made theirs squat and wide. This distinction parallels the *annular* and *tabular* categories commonly employed by physical anthropologists in the Andes. In their own unique ways, Spanish colonial accounts and the “dichotomous approach” to CVM categorization simplify the complicated reality of modification practices—the former by presenting CVM as a static marker of ethnic identity, the latter by assimilating variation in form and degree into ideal types. Recent excavations at two cemeteries in the Collagua heartland have recovered a large sample of well-preserved human crania (N=211), of which over 40% are *not* modified, undermining a simple correspondence between head shape, region, and ethnic identity. Individuals with different modification styles were apparently buried in the same mortuary chambers alongside unmodified individuals, although modified crania are disproportionately found in contexts dating to the latter part of the Late Intermediate Period (AD 1300-1450). The social and chronological implications of these data for processes of ethnogenesis, ethnic complementarity, and imperial incorporation in the Colca valley are examined.

Rethinking the Formative process: A view from the Atacama Desert, Northern Chile (South Central Andes)

Estefania Vidal-Montero, Universidad de Chile, and Mauricio Uribe, Universidad de Chile

Almost ten years ago, L.G. Lumbreras stated that the traditional concept of “Formative” was unable to account for the diversity of social processes occurring in the Central Andes during the last three millennia BCE. The existence of multiple “formatives” was proposed in light of the diverse evidence from different contexts throughout South America. The purpose of this paper is to contribute to this discussion through our studies in the Atacama Desert, Northern Chile, highlighting the particularities of this phenomenon from the perspective of local histories that complicate the distinctions made between hunting-gathering and farming, mobility and sedentism, and Archaic versus Formative contexts. The material evidence that we have studied so far –centered on the Pampa del Tamarugal basin and the adjacent coastline– indicates that such categorizations are insufficient for understanding the variability of scenarios that are reflected on the archaeological record. As a sociohistorical process, the Formative did not represent an ideal of progress or technological development, often explained through economic

and social transformations predicated upon ideas of “efficiency” and “complexity”. We propose, instead, a view that underlines the inherent contradictions between individuals, society and culture, hoping to contribute to an alternative understanding of these transformations.

Mimesis and Convergence in the Southern Jequetepeque Valley: Mountain Simulators in the Ancient North Coast of Peru

John P. Warner, University of South Florida Sarasota/Manatee, and Edward Swenson, University of Toronto

Recent archaeological research in the Southern Jequetepeque Valley has revealed that the coastal massif of Cerro Cañoncillo was venerated as a powerful huaca from the Late Formative into the Late Horizon Period. The main objective of this presentation is to examine the evidence that identifies the role played by Cerro Cañoncillo in actively shaping the cultural landscape, built environment, and ritual activities associated with the nearby, Late Formative period site of Jatanca (500-100 BC). In addition, a study of the relationship between Cerro Cañoncillo and Jatanca will allow archaeologists to move beyond generic generalizations of coastal religious architecture as mimetic mountains, and broaden our ideas related to the past political and social landscapes that were anchored by these important landmarks. Ultimately, an exploration of the mimetic faculty of monumental architecture at Jatanca permits a critical reappraisal of the storied concept of the “ceremonial center” in the Andes and beyond.

Ghosts of the Haciendas: Memory and Architecture on the Former Jesuit Wine Estates of Nasca

Brendan Weaver, Vanderbilt University

The implementation of the Velasco administration’s agrarian reforms in the 1970s transformed Peru’s rural landscape and the ways in which communities relate to the physical reminders of the time of the haciendas. Community engagement during recent archaeological research at colonial Jesuit wine haciendas in Nasca’s Ingenio Valley has revealed narratives which link historical memory on the former estates to fantastical imagery of ghosts, treasure, and mysterious tunnels, which simultaneously reference multiple attitudes related to a painful past. This paper ethnographically explores local engagement with hacienda architecture and memories of the hacienda period, which formulate a palimpsest of complicated narratives indexing the modern communities’ diversely experienced relationship to multiple historical events stretching into the deep colonial past, simultaneously expressing associated trauma, loss, and hope.

Poster Presentation Titles and Abstracts:

Dead Among the Living: A GIS Network Analysis of the Burials in a Recuay Residential Complex

Corey Bowen, Vanderbilt University

During the the Early Intermediate Period (1-700 CE), Recuay chiefdoms took power in the highlands of Ancash. Their artisans crafted ceramic images of chiefs, warriors, and great forefathers that were used in feasting rituals outside kin-based sepulchres; a tradition of ancestor veneration that would continue through later cultural phases. At the site of Hualcayan in the Huaylas Province, this transition has been studied through excavations at Formative Period ceremonial mounds, Recuay plazas, and burials from both eras. A town also once stood nearby, though it has received very little study. The 8 hectare residential sector at Hualcayan contains two primary domestic complexes. Preliminary survey suggests the area was a domestic space beginning with the Early Intermediate Period and continuing until the Late Intermediate Period. While the majority of the site's burials lie outside this zone, a half-dozen tombs have been located within it. Some are free-standing, multi-chambered chullpas, and others are enclosed machays, dug out beneath large boulders and integrated into the complexes' walls. This poster examines the placement of these tombs by comparing their location with a network map generated for the sector. Using GIS Network Analysis, I will investigate the relationship between probably access patterns of the residential complexes and the location of the burials within them.

Extended Arm Monoliths and Tiwanaku Geopolitics

John W. Janusek, Vanderbilt University, and Anna Guengerich, University of Chicago

Ongoing research on Tiwanaku stone sculpture indicates a diverse range of contemporaneous sculptural classes in the Southern Lake Titicaca Basin. By far, most attention has hitherto focused on so-called Presentation monoliths, which depict large anthropomorphic personages who hold, hands pressed against the front torso, a kero in the left hand what Torres identifies as a snuff tablet in the right. We draw attention to a parallel class of monoliths- what we term Extended Arm monoliths –that hold their arms to their sides. While Presentation monoliths are only found as large scale sculptures at Tiwanaku itself, Extended Arm monoliths vary from small statuettes to large-scale sculptures and are found at sites near Tiwanaku. We summarize the geopolitical implications of this monolith class in regard to their size range, spatial locations, and relationship to the better-known Presentation monoliths.

A Comparison of Networks of Movement on Eastern and Western Andean slopes

Brian McCray, Vanderbilt University

Paracas Necropolis: "outsider" textiles

Ann H. Peters, University of Pennsylvania Museum of Anthropology and Archaeology

Reconstruction of Paracas Necropolis gravelot assemblages permits identification of garment types and image styles that recur in contemporary tombs. In each mortuary bundle one or two “home” styles dominate the textile assemblage, while a range of other “visitor” styles, more typical of other bundles, may be present. We have also identified “outsider” textiles, distinct in form, technique and style from the embroideries typical of Paracas Necropolis, which appear in many of the larger bundles. What may these garment forms indicate about the social group(s) that carried out mortuary rites at the Necropolis of Wari Kayan and their evolving sociopolitical alliances?

Trauma and Trepanation during the Early Intermediate Period and Middle Horizon in the Callejón de Huaylas

Emily Sharp, Arizona State University, and Rebecca Bria, Vanderbilt University

Trepanation was practiced in the ancient Andes for over two millennia; however, this type of cranial surgery has not been well documented in highland Ancash. This study presents cranial trauma frequencies and trepanation rates for two sites, Aukispukio and Hualcayán, in the Callejón de Huaylas, Peru. As part of the PIARA archaeological project, the human skeletal remains were collected from several types of mortuary contexts, including chullpas, machays, and subterranean tombs, and they likely date to the Early Intermediate Period and Middle Horizon (AD 1-1000). Nine individuals (6.8% of the observed sample) showed evidence of trepanation, with the majority of cases found in association with traumatic injuries. A detailed analysis of trepanation size and location on the crania is reported. When sex and age-at-death could be determined, all affected individuals with trepanation were adult males. These results, coupled with the high rates of cranial trauma at both sites, have profound implications for understanding the development of novel surgical techniques during times of intensified violence and warfare.